

UNITED STATES PATENT AND TRADEMARK OFFICE



FILING DATE FIRST NAMED INVENTOR APPLICATION NO. ATTORNEY DOCKET NO. CONFIRMATION NO. 09/455,574 12/06/1999 AALBERTUS PIETER KROESBERGEN 702/991620 5330 02/26/2002 RUSSELL D ORKIN **EXAMINER** 700 KOPPERS BUILDING JOHNSON, JONATHAN J

436 SEVENTH AVENUE: PITTSBURGH, PA 152191818

ART UNIT PAPER NUMBER

1725 DATE MAILED: 02/26/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

e g	Application No.	Applicant(s)
Office Action Summary	09/455,574	KROESBERGEN, AALBERTUS PIETER
	Examin r	Art Unit
	Jonathan Johnson	
The MAILING DATE of this communication a Period for Reply		
A SHORTENED STATUTORY PERIOD FOR REP THE MAILING DATE OF THIS COMMUNICATION - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication If the period for reply specified above is less than thirty (30) days, a re - If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by state - Any reply received by the Office later than three months after the main earned patent term adjustment. See 37 CFR 1.704(b). Status	1. 1.136(a). In no event, howeve eply within the statutory minim od will apply and will expire SIX ute. cause the application to by	r, may a reply be timely filed um of thirty (30) days will be considered timely. ((6) MONTHS from the mailing date of this communication. ecome ABANDONED (35 U.S.C. § 133).
1) Responsive to communication(s) filed on <u>0</u> 6	<u> 6 December 1999</u> .	
2a)⊠ This action is FINAL . 2b)□	This action is non-fina	al.
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.		
Disposition of Claims		
4) Claim(s) <u>35-36,38-50,61-64</u> is/are pending i	in the application.	
4a) Of the above claim(s) is/are withdo	rawn from considerati	on.
5) Claim(s) is/are allowed.		
6)⊠ Claim(s) <u>35,36,38,39,42-50 and 61-64</u> is/are rejected.		
7)⊠ Claim(s) <u>40 and 41</u> is/are objected to.		
8) Claim(s) are subject to restriction and	d/or election requirem	ent.
Application Papers		
9)☐ The specification is objected to by the Examin	ner.	
10)☐ The drawing(s) filed on is/are: a)☐ acc	cepted or b) objected	to by the Examiner.
Applicant may not request that any objection to		
11)☐ The proposed drawing correction filed on	is: a)∏ approved	b) disapproved by the Examiner.
If approved, corrected drawings are required in	reply to this Office actio	n.
12) The oath or declaration is objected to by the	Examiner.	
Priority under 35 U.S.C. §§ 119 and 120		
13) Acknowledgment is made of a claim for fore	ign priority under 35 l	J.S.C. § 119(a)-(d) or (f).
a)⊠ All b)□ Some * c)□ None of:		
 Certified copies of the priority docume 		
2. ✓ Certified copies of the priority docume		
 3. Copies of the certified copies of the prapplication from the International I * See the attached detailed Office action for a li 	Bureau (PCT Rule 17	.2(a)).
14) Acknowledgment is made of a claim for dome		
a) The translation of the foreign language p	provisional application	n has been received.
Attachment(s)	. •	
 Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449) Paper No(s 	5) 🔲 N	nterview Summary (PTO-413) Paper No(s) Notice of Informal Patent Application (PTO-152) Other:

Art Unit: 1725

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 46, 48, 49 and 62 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 48, Lines 3 and 4, the term "cellulose-like polymer" is indefinite as to scope, because it is unclear what is encompassed and excluded by this term.

In claim 49, Line 3, the term "fibre" should be changed to --fiber-- to conform to US spelling. Also, in claim 49, line 3, the term "petrojelly-like filling compound" because it is unclear what is encompassed and excluded by this term.

Claim Rejections - 35 USC § 102/103

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Page 3

Application/Control Number: 09/455,574

Art Unit: 1725

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 35, 41-45, 48, and 49 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103 (a) as obvious over Masuda. Masuda et al. teaches the preparation of highly water absorbent materials employing resins produced by polymerizing cellulose, at least one polymerizable monomer, a cross linking agent, and optionally in the presence of a radical polymerization catalyst (abstract and Column 5, Lines 1-6). The composition can be mixed with various additives (Column 5, Lines 50-56). The water absorbing resins may be applied to various substrates such as cloth or paper by any known method (Column 6, Lines 3 et seq). Such methods include immersing the substrate in an aqueous solution of the mixture and subsequently drying the substrate. Additionally, the polymerization may result after combining with the substrate and then dried for use (Column 6, Lines 1-23). Masuda anticipated the claimed subject matter. Masuda does not specifically disclose that the super absorbent material is in the form of a plurality of discrete, substantially semi-spherical islets with a diameter of between 10 and 1000 microns. However, Masuda uses the same components in the same amounts and appears to prepare the substrate by an identical superabsorbent material. Alternatively, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have optimized the shape and size of the superabsorbent material of Masuda, since it has been held that discovering the optimum or workable ranges involve only routine skill in the art. In re Aller, 105 USPQ 233. In the present case, it would have been obvious to the skilled artisan to have optimized the shape and size of the super

Art Unit: 1725

absorbent material of Masuda motivated by the desire to obtain a substrate having predetermined absorbency properties. It is the examiner's position that the substrate of Burkholder and Gross is identical to or only slightly different than the claimed substrate prepared by the method of the claimed method, because both substrates are formed by a similar method and result in a highly absorbent article. Even though the product by process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or an obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. In re Thorpe, 227 USPQ 964, 966 (Fed. Cir. 1985). The burden has been shifted to the applicant to show unobvious differences between the claimed product and the prior art product. In re Marosi, 218 USPQ 289, 292 (Fed. Cir. 1983). Alternatively, it is well known in the art to use a catalyst material in order to control the rate of crosslinking and it would have been obvious to the skilled artisan to add a catalyst material to the composition of Burkholder and Gross either anticipated or strongly suggested the claimed subject matter. It is noted if the applicant intends to rely on Examples in the specification or in a submitted Declaration to show non-obviousness, the applicant should clearly state how the Examples of the present invention are commensurate in scope with the claims and how the Comparative Examples are commensurate in scope with the prior art.

Claims 35, 38, 48, and 49 are rejected under 35 U.S.C. 102(b) as being anticipated by Burkholder, Jr. (4,154,898) or Gross (4,017,654). Burkholder and Gross disclose the production of absorbent substrates by applying a composition of a hydrophilic polymer together with a

Art Unit: 1725

cross-linking agent on a substrate and subsequently curing of the coating. The coating can be applied to various substrates to forma s uper-absorbent article, such as surgical sponges and fibrous sheets and webs. Burkholder and Gross anticipated the claimed subject matter.

Claims 36, 39, and 47 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103 (a) as obvious over Masuda. With regard to claims 36, 39, and 52, Masuda does not specifically disclose that the super absorbent material is in the form of a plurality of discrete, substantially semi-spherical islets with a diameter of between 10 and 1000 microns. However, Masuda uses the same components in the same amounts and appears to prepare the substrate by an identical super-absorbent material. Alternatively, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have optimized the shape and size of the super-absorbent material of Masuda, since it has been held that discovering the optimum or workable ranges involve only routine skill in the art. In re Aller, 105 USPO 233. In the present case, it would have been obvious to the skilled artisan to have optimized the shape and size of the super absorbent material of Masuda motivated by the desire to obtain a substrate having predetermined absorbency properties. With regard to Claim 47, it is the examiner's position that the substrate of Masuda is identical to or only slightly different than the claimed substrate prepared by the method of the claimed method, because both substrates are formed by a similar method and result in a highly absorbent article. Even though product-byprocess claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or an obvious from a

Art Unit: 1725

product of the prior art, the claim is unpatentable even though the prior product was made by a different process. *In re Thorpe*, 227 USPQ 964, 966 (Fed. Cir. 1985). The burden has been shifted to the applicant to show unobvious differences between the claimed product and the prior art product. *In re Marosi*, 218 USPQ 289, 292 (Fed. Cir. 1983). Masuda either anticipated or strongly suggested the claimed subject matter. It is noted that if the applicant intends to rely on Examples in the specification or in a submitted Declaration to show non-obviousness, the applicant should clearly state how the Examples of the present invention are commensurate in scope with the claims and how the Comparative Examples are commensurate in scope with the Masuda.

Claims 36, 37, 39, 41-45, and 47 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103 (a) as obvious over Burkholder, Jr. or Gross. With regard to Claims 36, and 39 Burkholder and Gross do not specifically disclose that the super absorbent material is in the form of a plurality of discrete, substantially semi-spherical islets with a diameter of between 10 and 1000 microns. However, Burkholder and Gross use the same components in the same amounts and appears to prepare the substrate by an identical method as the present invention; thus it is the examiner's position that Burkholder and Gross inherently have a identical super-absorbent material. Alternatively, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have optimized the shape and size of the super-absorbent material of Burkholder and Gross, since it has been held that discovering the optimum or workable ranges involve only routine skill in the art. *In re Aller*, 105 USPQ 233. In the present case, it would have been obvious to the skilled artisan to have

Art Unit: 1725

optimized the shape and size of the super-absorbent material of Burkholder and Gross motivated by the desire to obtain a substrate having predetermined absorbency properties. With regard to Claims 37, 41-45 and 47, it is the examiner's position that the substrate of Burkholder and Gross is identical to or only slightly different than the claimed substrate prepared by the method fo the claimed method, because both substrates are formed by a similar method and result in a highly absorbent article. Even though the product by process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or an obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. In re Thorpe, 227 USPQ 964, 966 (Fed. Cir. 1985). The burden has been shifted to the applicant to show unobvious differences between the claimed product and the prior art product. In re Marosi, 218 USPQ 289, 292 (Fed. Cir. 1983). Alternatively, it is well known in the art to use a catalyst material in order to control the rate of crosslinking and it would have been obvious to the skilled artisan to add a catalyst material to the composition of Burkholder and Gross either anticipated or strongly suggested the claimed subject matter. It is noted if the applicant intends to rely on Examples in the specification or in a submitted Declaration to show non-obviousness, the applicant should clearly state how the Examples of the present invention are commensurate in scope with the claims and how the Comparative Examples are commensurate in scope with Burkholder and Gross.

Claim 50 is rejected under 35 U.S.C. 103(a) as being unpatentable over Burkholder, Jr. or Gross. With regard to Claim 50, neither Burkholder or Gross disclose the specific composition

Art Unit: 1725

ranges of the components. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to have optimized or found workable concentration ranges for the composition of Burkholder and Gross since it has been held that discovering the optimum or workable ranges involves only routine skill in the art *In re Aller*, 105 USPQ 322.

Claims 46 and 61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Masuda, Burkholder, Jr. or Gross in view of Bottiglione et al. (5,246,770). Masuda, Burkholder, and Gross do not specifically disclose adding soot to the composition to make it conductive or forming a cable comprising the substrate material as the sheathing material. Bottiglione discloses that it is known in the art to apply conductive material to a super absorbent coated substrate material and use that material as a sheathing for a cable. It would have been obvious to the skilled artisan to have used the substrate of Masuda, Burkholder, or gross as a cable sheathing as taught by Bottiglione, motivated by the desire to obtain an effective water barrier for a cable. Additionally it would have been obvious to the skilled artisan to have added a conductive material to the composition of masuda, Burkholder, or Gross, as taught in Bottiglione, motivated by the desire to form an electrically conductive material.

Claims 62 and 63 are rejected under 35 U.S.C. 103(a) as being unpatentable over Masuda, Burkholder, Jr. or Gross in view of Nishino et al. (5,275,884).

Nishino teaches an adsorbent product used in a baby diaper and packaging material (Column 5, Lines 61 through Column 6, Line 5). It would have been obvious to the skilled

Art Unit: 1725

artisan to have used the substrate of Masuda, Burkholder, or gross as a agricultural substrate as taught by Nishino et al. motivated by the desire to effectively contain liquids.

Claim 64 is rejected under 35 U.S.C. 103(a) as being unpatentable over Masuda,
Burkholder, Jr. or Gross in view of Miller (4,321,997). Miller teaches an agricultural substrate
comprising an absorbent (abstract). It would have been obvious to the skilled artisan to have used
the substrate of Masuda, Burkholder, or gross as a agricultural substrate as taught by Miller,
motivated by the desire to contain food juices.

Allowable Subject Matter

Claims 40 and 41 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is an examiner's statement of reasons for allowance: The prior art of record does not suggest or teach adding foaming agent to the super absorbent composition prior to applying the composition to the substrate and causing the composition to be foamed at any time after the addition of the foaming agent.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Art Unit: 1725

Response to Arguments

Applicant's arguments with respect to claims 35-36 and 38-50 and 61-64 have been considered but are most in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan Johnson whose telephone number is 703-308-0667. The examiner can normally be reached on M-Th 7AM-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Dunn can be reached on 703-308-3318. The fax phone numbers for the

Art Unit: 1725

organization where this application or proceeding is assigned are 703-305-7718 for regular communications and 703-305-5885 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

JJ February 19, 2002

> TOM DUNN SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 1700